IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): A power supply system which includes a plurality of power supply units, the outputs of which are parallelly connected to power transmission lines leading to a load, each of the power supply units comprising:

a generator;

an inverter for converting a voltage generated by the generator into an AC voltage and outputting the AC voltage;

an inverter control unit for controlling the inverter, comprising a load sharing adjuster for adjusting a shared load current supplied from the power supply unit; and

a connection apparatus for connecting the AC voltage output from the inverter to the power transmission lines.

Claim 2 (Original): A power supply system according to Claim 1, wherein

the inverter of each of the power supply units comprises an AC/DC converter for converting an AC voltage generated by the generator into a DC voltage, a booster for boosting the converted DC voltage, and a DC/AC converter for converting the boosted DC voltage to an AC voltage to be output, and

the load sharing adjuster of the inverter control unit is adapted to control the booster of the inverter to output a constant DC voltage from the booster when the current outputted from the DC/AC converter is equal to or less than a predetermined current value which is less than a rated AC current, and to output a DC voltage from the booster which gradually decreases as the current increases when the current outputted from the DC/AC converter is more than the predetermined current.

Claim 3 (Original): A power supply system according to Claim 2, wherein the respective load sharing adjuster of each of the plurality of power supply units is adapted to control the associated booster to output a constant DC voltage which is different from the others.

Claim 4 (Original): A power supply system according to Claim 1, wherein

the inverter of each power supply unit comprises an AC/DC converter for converting a voltage generated by the generator into a DC voltage, a booster for boosting the converted DC voltage, and a DC/AC converter for converting the boosted DC current into an AC voltage to be output, and

the load sharing adjuster of the inverter is adapted to control the DC/AC converter of the inverter to output a constant AC voltage therefrom when the current outputted from the DC/AC converter is equal to or less than a predetermined current value which is less than a rated AC current value, and to output an AC voltage which gradually decreases as the current increases from the AC/DC converter when the current outputted from the DC/AC converter is more than the predetermined current.

Claim 5 (Original): A power supply system according to Claim 4, wherein the load sharing adjuster of each of the plurality of power supply units is adapted to control the associated DC/AC converter to output a constant DC voltage which is different from the others.

Claim 6 (Original): A power supply system according to Claim 1, wherein

the inverter of each of the power supply units comprises an AC/DC converter for converting a voltage generated by the generator into a DC voltage, a booster for boosting the

converted DC voltage, and a DC/AC converter for converting the boosted DC current into an AC voltage to be output, and

the load sharing adjuster of the inverter is adapted to control both the booster and DC/AC converter to output a constant DC voltage from the booster and output a constant AC voltage from the DC/AC converter when the current output from the DC/AC converter is equal to or less than a predetermined current which is less than a rated AC current, and to output a DC voltage which gradually decreases as the current increases from the booster and output an AC voltage which gradually decreases from the AC/DC converter when the current outputted from the DC/AC converter is more than the predetermined current.

Claim 7 (Original): A power supply system according to Claim 6, wherein the load sharing adjuster of each of the plurality of power supply units is adapted to control the associated booster to output a constant DC voltage which is different from the others, and control the associated DC/AC converter to output a constant AC voltage which is different from the others.

Claim 8 (Original): A power supply system for supplying power to a load, comprising:

a plurality of power supply units, the outputs of which are parallelly connected to power transmission lines to the load, each of the power supply units comprising:

a generator;

an inverter for converting a voltage generated by the generator into an AC voltage and outputting the AC voltage;

an inverter control unit for controlling the inverter, comprising a first synchronization controller operable in a linkage operation with an external AC power

supply, for detecting a voltage of the external AC power supply to control the inverter so that the AC voltage outputted from the inverter is in phase with the voltage of the external AC power supply; and

a connection apparatus for connecting the AC voltage outputted from the inverter to power transmission lines; and

a multiple power unit controller for controlling the plurality of power supply units to individually start and stop and for controlling output power of the respective power supply units.

Claim 9 (Currently Amended): A power supply system according to Claim 8, wherein each of the power supply units further comprises:

means for generating an autonomous operation detection synchronizing signal;

an autonomous operation detector for detecting, during a predetermined time period from the output timing of the autonomous operation detection synchronizing signal, whether the power supply system is in the autonomous operation in which the system is disconnected from the external AC power supply;

means for transmitting the autonomous operation detection synchronizing signal to the other power supply units; and

means for receiving the autonomous operation detection synchronizing signals from the other power supply units~~, whereby all the power supply units in operation can conduct the autonomous operation detection at the same timing~~.

Claim 10 (Currently Amended): A power supply system according to Claim 8, wherein at least one power supply unit further comprises:

means for generating the autonomous operation detection synchronizing signal;

an autonomous operation detector for detecting, during a predetermined time period from the output timing of the autonomous operation detection synchronizing signal, whether the power supply system is in the autonomous operation in which the system is disconnected from the external AC power supply; and

means for transmitting the autonomous operation detection synchronizing signal to the other power supply units~~, whereby all the power supply units in operation can conduct the autonomous operation detection at the same timing~~.

Claim 11 (Currently Amended): A power supply system according to Claim 9 ~~or 10~~, wherein the autonomous operation detector of each of the power supply unit is adapted to function as a power failure detector for detecting a failure of the external AC power supply during a linkage operation with the external AC power supply.

Claim 12 (Original): A power supply unit comprising a generator, an inverter for converting the power generated by the generator to a predetermined AC voltage, and a connection apparatus for connecting the output of the inverter to a load, wherein they are unified, the power supply unit comprising:

a synchronizing signal generator for generating a synchronizing signal corresponding to an output voltage wave of the inverter;

a synchronizing signal output circuit for outputting the synchronizing signal;

a synchronizing signal input circuit for inputting a synchronizing signal; and

a circuit for transmitting and receiving the synchronizing signal to and from the other units.

Claim 13 (Currently Amended): A power supply system according to ~~any one of Claims 8-11~~ Claim 8, wherein the system further comprises a synchronizing signal line connected in common to the plurality of power supply units, and the inverter control unit of each of the power supply units comprises a second synchronization controller, the second synchronization controller comprising:

a synchronizing signal generator circuit for generating a synchronizing signal having a first cycle which is synchronized with the AC voltage outputted from the associated inverter and outputting the synchronizing signal onto the synchronizing signal line, in which the synchronizing signal generator circuit generates the synchronizing signal having the first cycle from a reception timing of the synchronizing signal generated by itself or the synchronizing signal outputted onto the synchronizing signal line from the synchronizing signal generator circuit of another power supply unit.

Claim 14 (Currently Amended): A power supply system according to ~~any one of Claims 8-11~~ Claim 8, wherein

each of the power supply units further comprises a waveform detector for detecting a waveform of an AC voltage at the connection section, and

the autonomous operation detector of each power supply unit is adapted to shift the frequency of the AC voltage outputted from the associated power supply unit in a positive or a negative direction and then in the negative or positive direction for a predetermined time period from the generation of the autonomous operation detection synchronizing signal, and determine that the external AC power supply is shut off when the waveform detected by the waveform detector has a frequency other than the frequency of the external AC power supply during the predetermined period.

Claim 15 (Original): A power supply system according to Claim 8, wherein the inverter control unit of each of the power supply units further comprises a synchronization controller for synchronizing the phase of the AC voltage outputted from the associated inverter to the phase of the AC voltage output from the inverter of another power supply unit during an autonomous operation in which the power supply system is disconnected from the external AC power supply, or to the phase of the AC voltage of the external AC power supply.

Claim 16 (Original): A power supply system according to Claim 15 further comprising synchronizing signal lines connected in common to the plurality of power supply units, wherein the synchronizing controller of each power supply unit comprises:

a synchronizing signal generator circuit for generating a synchronizing signal having a first cycle synchronized to the AC voltage outputted from the associated inverter and outputting the synchronizing signal onto the synchronizing signal line, in which the synchronizing signal generator circuit generates the synchronizing signal having the first cycle from a reception timing of the synchronizing signal generated by itself or the synchronizing signal outputted onto the synchronizing signal line from the synchronizing signal generator circuit of another power supply unit.

Claim 17 (Currently Amended): A power supply system according to Claim 15 ~~or 16~~, wherein

each of the power supply units further comprises a waveform detector for detecting the waveform of an AC voltage at the connection section, and an external power supply shut-off detector for detecting whether the external AC power supply is shut off, and

the external power supply shut-off detector of each power supply unit periodically shifts the frequency of the AC voltage outputted from the associated power supply unit in a positive or a negative direction and then in the negative or positive direction for a predetermined period, and determines that the external AC power supply is shut off when the waveform detected by the waveform detector has a frequency other than the frequency of the external AC power supply during the predetermined period.

Claim 18 (Original): A power supply system for supplying electric power to a load, comprising:

power transmission lines for supplying electric power to the load in at least one of a linkage operation with an external AC power supply and an autonomous operation in which the power supply system is disconnected from the external AC power supply;

a plurality of power supply units, outputs of which are parallelly connected to the power transmission lines, each of the plurality of power supply units comprising:

a generator;

an inverter for converting a voltage generated by the generator into an AC voltage and outputting the AC voltage;

an inverter control unit for controlling the inverter, comprising a synchronization controller for synchronizing the phase of the AC voltage outputted from the inverter to the phase of a predetermined AC voltage; and

a connection apparatus for supplying the AC voltage outputted from the inverter to the power transmission lines; and

a multiple power unit controller for controlling each of the power supply units to start and stop and for controlling the output of each power supply unit.

Claim 19 (Original): A power supply system according to Claim 18, wherein the predetermined AC voltage is a voltage from the external AC power supply or the remaining power supply units.

Claim 20 (Currently Amended): A power supply system according to Claim 18 ~~or 19~~, wherein the synchronization controller of each of the power supply units is adapted to monitor the AC voltage on the power transmission lines in autonomous operation to synchronize the phase of the AC voltage output from the associated inverter to the phase of the AC voltage.

Claim 21 (Currently Amended): A power supply system according to ~~any one of Claims 18-20~~ Claim 18, wherein

the multiple power unit controller is adapted to output a control signal for controlling the operation of the plurality of power supply units onto the power transmission lines through a power-line carrier modem.

Claim 22 (Currently Amended): A power supply system according to ~~any one of Claims 18-20~~ Claim 18, wherein

the system further comprises communication lines such as wireless communication lines, optical communication lines, and a digital bus, and

the multiple power unit controller is adapted to supply a control signal for controlling the operation of the plurality of power supply units to the plurality of power supply units through the communication lines.

Claim 23 (Currently Amended): A power supply system according to ~~Claims 21 or 22~~ Claim 21, wherein the multiple power unit controller is adapted to generate the control signal in response to control information supplied thereto from an external device through a communication means.

Claim 24 (Currently Amended): A power supply system according to ~~any one of Claims 21-23~~ Claim 21, wherein the control signal outputted from the multiple power unit controller includes a signal for controlling each of the respective power supply units to be operated to output an AC voltage having a value different to the others.

Claim 25 (Currently Amended): A power supply system according to ~~any one of Claims 18-23~~ Claim 18, wherein the inverter of each of the power supply units comprises:

an AC/DC converter for converting a voltage generated by the generator into a DC voltage;

a booster for boosting the converted DC voltage; and

a DC/AC converter for converting the boosted DC voltage into an AC voltage to be output.

Claim 26 (Original): A power supply system according to Claim 25, wherein

the system comprises means for presetting values of the AC voltages outputted respectively from the plurality of power supply units, the values being different to each other, and

the inverter control unit of each of the power supply units is adapted to control the DC/AC converter of the associated inverter to fix the operation when the AC current or power outputted from the power supply unit exceeds the preset value.

Claim 27 (Original): A power supply system according to Claim 25, wherein

the system comprises means for presetting values of the AC voltages outputted respectively from the plurality of power supply units, the values being different to each other, and

the inverter control unit of each of the power supply units is adapted to control the booster of the associated inverter to fix the operation when the AC current or power outputted from the power supply unit exceeds the preset value.

Claim 28 (Original): A power supply system according to Claim 25, wherein

the multiple power unit controller comprises means for outputting control signals designate of voltage values such that the plurality of power supply units provide AC voltages having different values from the others, and

the inverter controller of each of the power supply units is adapted to control the DC/AC converter of the associated inverter to fix the operation when the AC current or power outputted from the power supply unit exceeds the preset value.

Claim 29 (Original): A power supply system according to Claim 25, wherein

the multiple power unit controller comprises means for outputting control signals designate of voltage values such that the plurality of power supply units provide AC voltages having different values from the others, and

the inverter controller of each of the power supply units is adapted to control the booster of the associated inverter to fix the operation when the AC current or power outputted from the power supply unit exceeds the preset value.

Claim 30 (Currently Amended): A power supply system according to ~~any one of Claims 18-29~~ Claim 18, wherein the inverter control unit of each of the power supply units further comprises a load sharing adjuster for adjusting a shared load current supplied by the associated power supply unit.

Claim 31 (Original): A power supply system according to Claim 25, wherein

the inverter control unit of each of the power supply units further comprises a load sharing adjuster for adjusting a shared load current supplied by the associated power supply unit, and

the load sharing adjuster is adapted to control the booster and DC/AC converter of the inverter such that a constant DC voltage is provided from the booster and a constant AC voltage is provide from the DC/AC converter when an AC current outputted from the DC/AC converter is equal to or less than a predetermined current which is equal to or less than a rated AC current, and a DC voltage which gradually decreases as the current increases is provided from the booster and an AC voltage which gradually decreases as the current increases is provided from the AC/DC converter when the current outputted from the DC/AC converter is more than the predetermined current.

Claim 32 (Currently Amended): A power supply system according ~~any one of Claims 25-31~~ to Claim 25, wherein

the inverter of each of the power supply units comprises means for controlling a DC voltage from the booster of the power supply unit to be not less than a predetermined value to thus set a lower limit for the AC voltage output from the power supply unit.

Claim 33 (Currently Amended): A power supply system according to ~~any one of Claims 1-32~~ Claim 1, wherein the generator of each of the power supply units is a generator directly coupled to a gas turbine engine.

Claim 34 (New): A power supply system according to Claim 22, wherein the multiple power unit controller is adapted to generate the control signal in response to control information supplied thereto from an external device through a communication means.

Claim 35 (New): A power supply system according to Claim 22, wherein the control signal outputted from the multiple power unit controller includes a signal for controlling each of the respective power supply units to be operated to output an AC voltage having a value different to the others.